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Ian Michael Hosking

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EXAMINER

OKEKE, ONYEDIKA C

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,016	<b>Applicant(s)</b> HOSKING ET AL.	
	<b>Examiner</b> Dika C. Okeke	<b>Art Unit</b> 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,12-17,19-33,36,40 and 42-66 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-10,12-17,19-33,36, 40 and 42-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed 23 October 2009 has been entered. Claim 8 has been withdrawn. Claims 2, 3, 11, 18, 34, 35, 37-39 and 41 have been cancelled. Claims 42-66 have been added. Claims 1, 4-7, 9, 10, 12-17, 19-33, 36, 40 and 42-66 are now pending.

### ***Response to Arguments***

2. Applicants' arguments with respect to claims 1, 33 and 40 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicants also argue that in the system proposed by Zwaneveld, the "venue" itself performs the processing to synchronize the subtitles with the film, which it then displays for everyone at the venue to see.

4. Examiner respectfully disagrees in part and points out that processor element 14 in Fig. 3 may be a computer associated with a monitor (page 30, lines 10-13 – which can certainly be portable; See also display 19 for a clear contemplation on a separate screen for the display of subtitles). Further, see page 18, lines 5-8; page 19, lines 5-10; page 21, lines 1-7 – for suggestions that the display for the subtitles can be portable and certainly discriminated from the main display of the film.

5. However, to further advance this application to an allowance, Examiner will provide a reference teaching a separate user device usable to provide individualized captions, and further adapted to receive a wireless signal that is time synchronized with the presentation.

***Important Note to Applicants***

6. The examiner notes that "operable to" indicates intended use and it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations *Ex parte Masham*, 2 U.S.P.Q.2d 1647 (1987). Further, in other words, intended use/functional language does not require that reference specifically teach the intended use of the element. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Hence, if the prior art structure is capable of performing the intended use, then the prior art rejects the broadest reasonable interpretation of the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-7, 9, 10, 12-17, 19-31, 33, 36, 40 and 42-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwaneveld (CA 2129925) in view of Hale et al (US 6,785,539; referred hereinafter as "Hale").

Regarding claim 1, Zwaneveld teaches a captioning system for providing captions for a presentation to a user, the captioning system comprising:  
a caption store (storage element 11) operable to store one or more sets of captions each set being associated with one or more presentations and each set comprising a plurality of captions for playout at different timings during the associated presentation (page 9, line 18 – page 10, line 21; *for display cue stamps comprises a display time stamp, each display time stamp comprising a first time and second time respectively marking the beginning and the end of the display of a subtitle*).

However, Zwaneveld does not explicitly teach:

a portable user device having:

a first receiver operable to receive, from said caption store, at least one set of captions for storage in the user device or to receive a sequence of captions for a presentation to be made to a user associated with the user device;

a second receiver operable to receive a wireless signal that is time synchronized with the presentation for use in defining the timing during the presentation at which each caption is to be output to the user associated with the user device;

a caption output circuit operable to output each received caption to the user associated with the user device; and

a timing controller operable to process said received wireless signal to determine the timing during the presentation at which each caption should be output and operable to

control said caption output circuit so that said each caption is output to said user at the determined timing.

In analogous art, Hale teaches:

a portable user device (portable device 14) having:

a first receiver operable to receive, from said caption store, at least one set of captions for storage in the user device or to receive a sequence of captions for a presentation to be made to a user associated with the user device (col. 2, line 63 – col. 3, line 3; col. 3, lines 17-21 – *for the portable user device receives caption texts and stores them*);

a second receiver operable to receive a wireless signal that is time synchronized with the presentation for use in defining the timing during the presentation at which each caption is to be output to the user associated with the user device (col. 3, lines 34-40; time codes; IR or RF signals that wirelessly trigger portable devices);

a caption output circuit operable to output each received caption to the user associated with the user device; and a timing controller operable to process said received wireless signal to determine the timing during the presentation at which each caption should be output and operable to control said caption output circuit so that said each caption is output to said user at the determined timing (col. 4, line 61 – col. 5, line 15; col. 5, lines 17-31 – *it is noted that a timing controller exists in the user device for the subtitles to be synced*

*to the proper presentation and displayed at the appropriate time denoted by the display time codes).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user device of Zwaneveld to be a "portable" device to work in tandem with the caption storage, as taught by Hale, for the benefit of combating the problems presented by "open captioning" and presenting captioning conveniently to a user (Hale, col. 1, lines 35-41; col. 2, lines 1-4).

Regarding claim 4, Hale further teaches the system according to claim 1, wherein said captions include text and wherein said caption output circuit is operable to output said captions to a display device associated with the user device for display to the user (col. 3, lines 34-40; col. 5, lines 17-31; *for closed captions include text and captions are displayed on the screen display of the portable device 14*).

Regarding claim 5, Hera further teaches the system according to claim 4, wherein said captions include formatting information for controlling the format of the text displayed on said display (*for the subtitles have certain formats which can be altered. It is noted that displayable texts are encoded with "formatting information" or instructions on how and where to appear on a display screen*).

Regarding claim 6, Zwaneveld teaches the system according to claim 4, wherein each caption includes duration information defining the duration that the caption should be displayed to the user (page 11, lines 1-6; *for the display cue stamp comprises display time stamp which denotes when the subtitles are to be shown. The display time stamp*

*further denotes a beginning and the end of the display of a subtitle – reading on claimed duration of caption display).*

Regarding 7, Zwaneveld teaches the system according to claim 4, wherein said caption includes timing information defining the time at which the caption should be displayed to the user during the presentation (page 11, lines 1-6; *for display time cues include display time marks denoting the timing information – beginning and end – of the subtitles*).

Regarding claims 9 and 10, Zwaneveld teaches the system according to claim 1, wherein said presentation: includes audio and includes video (page 25, lines 6-10+; page 30, lines 6-13. *See also Hale, col. 3, lines 34-40, 48-55 – for teaching on audio and video presentations*).

Regarding claim 12, Zwaneveld teaches the system according to claim 1, wherein said caption store is formed in a memory card which is insertable into said user device and wherein said user device includes a reader for reading captions from said memory card when inserted therein (page 17, lines 6-12; page 29, lines 11-17; *for the subtitle text files are stored in a memory medium – RAM, CD-Rom, floppy disk – which are portable; the caption storage element 11 can be embodied in a portable memory medium and sent to the user device – processing equipment – which would read/process it and send it to a display element. See also Hale, for teaching on storing of captions in the portable device and on memory cards -- col. 2, line 63 – col. 3, line 3*).

Regarding claims 13-15, **note the discussion on claim 12.** Hale further teaches



the system according to claim 1, wherein said caption store is provided in a computer system and wherein said user device includes a communication module for communicating with said computer system; wherein said computer system is remote from said user device; and wherein said user device includes a housing and wherein said communication module is provided within said housing (col. 2, line 63 – col. 3, line 17; *for it is noted that a docking station is used for connecting the portable device to a computer system; the docking station also may be used to connect the portable device to remote content sources. It is also well known that a mobile phone or PDA includes a housing and it is obvious that a communication module is housed inside to enable communication with a docking station*).

Regarding claims 16, Hale further teaches the system according to claim 13, wherein said communication module is operable to communicate with said remote computer system using a wireless communication link (col. 3, lines 12-16).

Regarding claim 17, Hale further teaches the system according to claim 16, wherein said user device comprises a mobile telephone or a personal digital assistant (col. 6, lines 43-46; PDA).

Regarding claim 19, the combined teachings of Zwaneveld and Hale teach the system according to claim 42, wherein said synchronization information defines expected time points for one or more predetermined portions of the presentation (*for the display time cues and time stamp indicates points denoting the portions of the presentation to output subtitle information. See also Hale for teaching on synchronization code associated with a beginning portion of a presentation*).

Regarding claim 20, Zwaneveld further teaches the system according to claim 19, wherein said user device comprises a monitoring circuit operable to monitor said presentation to identify the actual time points of said one or more predetermined portions *(for a "predetermined" portion of presentation can simply be the actual portions of the presentation that the user desires to receive closed caption or subtitle data; hence the actual time points of a predetermined portion is known by the user device because it is the device that user utilizes to request the closed caption or subtitle information. Hence giving this the broadest interpretation, the monitoring circuit in this case is merely checking or tracking the actual time in the presentation in which the user requested to receive caption information )* and wherein said timing controller is responsive to the difference between the actual timings and the expected timings to control the outputting of the captions by said caption output circuit *(for the display time stamps and cue identify the expected timing to output the caption information; the responsiveness of said timing controller to the difference between the actual timing and the expected timing is merely a form of error correction of synchronization signals. Official Notice is hereby taken to the fact that error correction is well known concept in the art).*

Regarding claim 21, Zwaneveld further teaches the system according to claim 20, wherein said predetermined portions of said presentation correspond to portions of audio of the presentation and wherein said monitoring circuit includes a microphone for sensing the audio of the presentation (Figs. 2-3, audio sensor element 8, 12; page 25, lines 16-20; page 26, lines 2-6; page 30, lines 4-12; *for audio of the presentation is captured by the audio sensor element. A microphone is a sound reader and can be used to sense the magnetic*

*flux from a sound recording)* and a comparator for comparing the received audio with the expected portions of the audio defined by said synchronization information (*for the received audio is processed and compared with the matching audio cue and time stamp to correlate the associated subtitle information*).

Regarding claim 22, Zwaneveld further teaches the system according to claim 20, wherein said user device has an acquisition mode of operation in which an output of said monitoring circuit is compared with said predetermined points defined by said synchronization information to identify a current position within said presentation and a tracking mode of operation in which the output of said monitoring circuit is compared with a current predetermined portion defined by said synchronization information (page 30, lines 13-22; *for the output of the monitoring circuit is merely the time the user requests sets course to request for a subtitle, which is compared to the syncing display time stamp. Hence, the acquisition and tracking modes of operation are merely met by the comparison of audio signal signatures and associated subtitles reputedly each time the user requests subtitle information by 'collecting' an audio sample of the desired portion and sending it to the processor element 14*).

Regarding claim 23, see the discussion on claim 22.

Regarding claim 24, the combined teachings of Zwaneveld and Hale further teach the system according to claim 1, wherein said receiver in said user device is operable to receive said synchronization information from said caption store (fig. 3; page 12, line 25 – page 13, line 3; page 17, lines 6-12; *for the sync info or time cue stamps*

*together with the subtitle info are stored in the storage device 11, which forwards them to the processor equipment 14 or Hale's portable user device 14).*

Regarding claim 25, Zwaneveld further teaches the system according to claim 1, wherein said synchronization information is embedded within said presentation and wherein said user device includes a monitoring circuit operable to monitor the presentation and to extract said synchronization information therefrom (page 12, line 25 – page 13, line 3; page 30, lines 10-25).

Regarding claim 26, Zwaneveld further teaches the system according to claim 25, wherein said synchronization information is embedded within the audio of said presentation (page 12, line 25 – page 13, line 3).

Regarding claim 27, Zwaneveld further teaches the system according to claim 25, wherein said synchronization information comprises synchronization codes occurring at different timings during the presentation (page 12, line 25 – page 13, line 3; *for synchronization codes are inherently embedded in the audio of the presentation to produce the synchronization information*).

Regarding claim 28, Zwaneveld further teaches the system according to claim 27, wherein each synchronization code is unique to uniquely define the position in the presentation (*for different or multiple display timings, it is noted that the synchronization information would also be different accordingly*).

Regarding claim 29, Zwaneveld teaches the system according to claim 1, wherein said caption store includes a plurality of sets of captions for a plurality of different

presentations (*for it is noted that the system provides subtitle information for different movies and films*).

Regarding claim 30, the combined teachings of Zwaneveld and Hale teach the system according to claim 29, wherein said user device is operable to capture a portion of said presentation and is operable to transmit the captured portion to said caption store and when said caption store is operable to use said captured portion of the presentation to identify the presentation being made and to transmit the associated set of captions for the identified presentation to said user device (page 30, lines 4-26; *for it is also obvious to modify the user device of Hale to capture the a part presentation and decipher the presentation being made and output the captions already stored in the user device, col. 5, lines 24-28*).

Regarding claim 31, **note the discussion on claim 30**. The combined teachings of Zwaneveld and Hale teach the system according to claim 30, wherein said user device is operable to process the captured portion of the presentation to extract data characteristic of the captured portion and is operable to transmit said characteristic data to said caption store, and wherein said caption store is operable to use said characteristic data to identify the presentation being made and to transmit the associated set of captions for the identified presentation to the user device (page 30, lines 4-26; *for the extracted characteristic data is audio signature of the captured portion of the presentation*).

Claim 33 is analyzed as the portable user device discussed in claim 1.

Regarding claim 36, the combined teachings of Zwaneveld and Hale teach a computer readable medium storing computer executable instructions for causing a general purpose computing device to operate as the user device of claim 1 (page 30, lines 10-13; *See also* Hale, col. 2, lines 46-47 – memory and processors).

Regarding claim 39, see claim 1. The display cue time marks indicates the timing for the presentation of subtitle data and audio synchronization information synchronizes the audio with the proper subtitle (page 12, line 25 – page 13, line 3).

Regarding claim 40, see claim 1.

Regarding claim 42, Hale further teaches a system according to claim 1, operable to receive synchronization information defining the timing during the presentation at which each caption is to be output to the user associated with the user device and wherein said timing controller is operable to use the received wireless signal and the received synchronization information in determining the timing during the presentation at which each caption should be output to the user (col. 4, line 61 – col. 5, line 15 – *for caption text content is synchronized with a presentation and displayed by the portable device, the synchronization made possible by time code signals received wirelessly from a transmitter, wherein the portable device plays the caption texts at appropriate time synchronous to the presentation*).

Regarding claim 43, Hale further teaches a system according to claim 1, wherein the first receiver is operable to receive a set of captions or said sequence of captions via a telephone network (col. 3, 4-7; col. 6, lines 43-47 – Hale, although not explicitly stating

it, fairly suggests that the portable device can be a mobile telephone -- "similar handheld with wireless communications receiver." An ordinary skilled artisan would understand and appreciate that a mobile telephone can be a portable device intended for use with Hale's invention; and it is obvious for a mobile telephone to communicate over a telephone network -- see also, col. 3, lines 14-17).

Regarding claim 44, Hale further teaches a system according to claim 1, wherein said first receiver is operable to receive said set of captions or said sequence of captions over a wired communications link in advance of the presentation (col. 3, lines 4-7, 17-21).

Regarding claim 45, Hale further teaches a system according to claim 1, wherein said user device is operable to use said first receiver to download a next caption from said caption store when it detects a synchronization code in the wireless signal received from said second receiver (col. 3, lines 22-33 -- *for use in downloading the caption content from a remote server by the portable device only when they are needed and thereby requested*).

Regarding claim 46, the combined teachings of Zwaneveld and Hale further teaches a system according to claim 1, wherein said wireless signal is an acoustic signal and wherein said second receiver comprises a microphone for receiving the acoustic signal (Figs. 2-3, audio sensor element 8, 12; page 25, lines 16-20; page 26, lines 2-6; page 30, lines 4-12; *for audio of the presentation is captured by the audio sensor element. A microphone is a sound reader and can be used to sense the magnetic flux from a sound recording*).

Regarding claim 47, Hale further teaches a system according to claim 1, wherein said wireless signal is an electromagnetic signal and wherein said second receiver is an electromagnetic receiver (RF signals; for it is well known that mobile telephones use radio EM waves and a mobile telephone is a receiver).

Regarding claim 48, **note the discussion on claim 43**. Hale further teaches a system according to claim 1, wherein said caption store is provided by a remote server, wherein said user device comprises a mobile telephone and wherein the user device allows said user to interact with the remote server using the mobile telephone (col. 3, lines 10-16).

Claim 49 is analyzed as a device of claims 4 and 5.

Claims 50 and 51 are analyzed as devices of claims 6 and 7 respectively.

Claim 52 is analyzed as a device of claims 13 and 14.

Claims 53 and 54 are analyzed as devices of claims 16 and 17 respectively.

Claim 55 is analyzed as a device of claim 42.

Claims 56-60 are analyzed as devices of claims 19-23 respectively.

Claim 61 is analyzed as a device of claim 25.

Claims 62-65 are analyzed as devices of claims 27, 28, 30 and 31 respectively.

Claim 66 is analyzed as a method of claim 1.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zwaneveld in view of Hale and further in view of Ogasawara (US 6,512,919).



Regarding claim 32, the combined teachings of Zwaneveld and Hale teach the system according to claim 1, wherein said presentation is given at a venue (*for a movie or film theatre is a venue. Further, venue broadly reads on any location*).

However, they do not explicitly teach wherein said venue is operable to provide an activation code, wherein said user device is operable to receive said activation code and further comprises a inhibitor for inhibiting the operation of said caption output circuit unless said user device has received said activation code.

Ogasawara teaches a venue operable to provide an activation code, wherein said user device is operable to receive said activation code (col. 3, lines 6-17; col. 9, lines 6-14; 33-42; *for the purchase transaction program is downloaded from the server to the mobile telephone, thereby reading on an activation code, because without the transaction program the videophone cannot function as a personal electronic shopping system*) and further comprises a inhibitor for inhibiting the operation of said caption output circuit unless said user device has received said activation code (for without the purchase transaction program being sent to it, the phone can't function as a shopping system; hence it is obvious that the phone has an 'inhibitor' or access denial mechanism).

Therefore, it would have been obvious to an ordinary skilled artisan to combine the teachings of Zwaneveld, Hale and Ogasawara – to modify the portable user device to include an access mechanism by receiving a program or access code to access the caption store - for the benefit of ensuring a privacy and proper identification of the user.

*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

11. Matsumoto et al (US 5,461,371).

12. Owens (US 5,493,281).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dika C. Okeke whose telephone number is (571)270-5367. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. to 7:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571)272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Dika C. Okeke/  
Examiner, Art Unit 2425

/Brian T. Pendleton/  
Supervisory Patent Examiner, Art Unit 2425